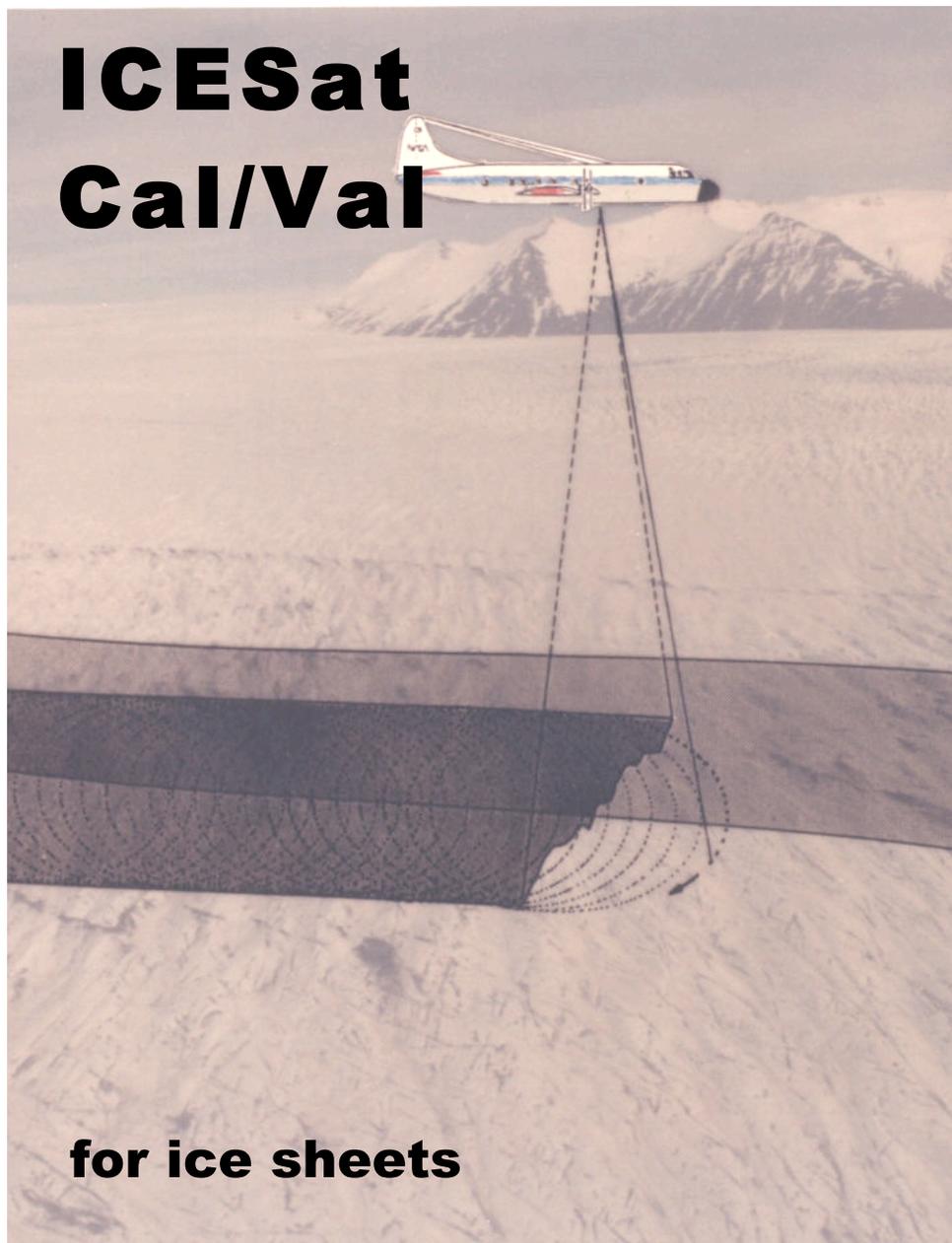


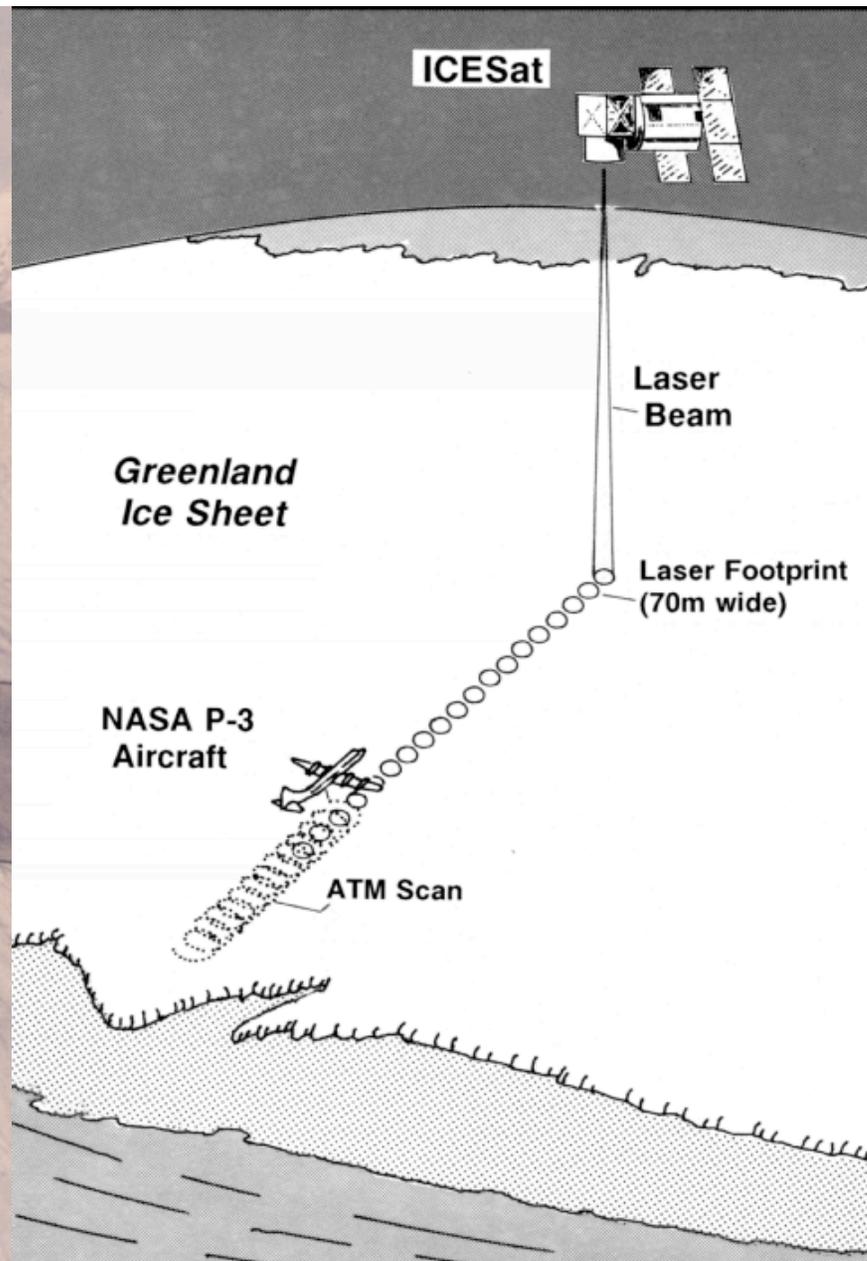
GLAS Cal/Val over surveyed terrain

- Comparison of airborne laser-altimeter surveys with GLAS measurements
- Surveys along orbit tracks in Greenland, Antarctica, western US, and over Arctic sea ice
- Aircraft data give:
 - independent elevation estimates of GLAS footprints
 - detailed topography within GLAS footprints, that determines shape of GLAS waveform
 - surface slopes, that determine magnitude of GLAS errors associated with miss-pointing of laser beam
- Inter-comparison of the two data sets yields:
 - assessment of overall GLAS performance over different terrains
 - estimated biases in GLAS range and pointing
 - assessment of GLAS estimates of surface roughness from waveform shape

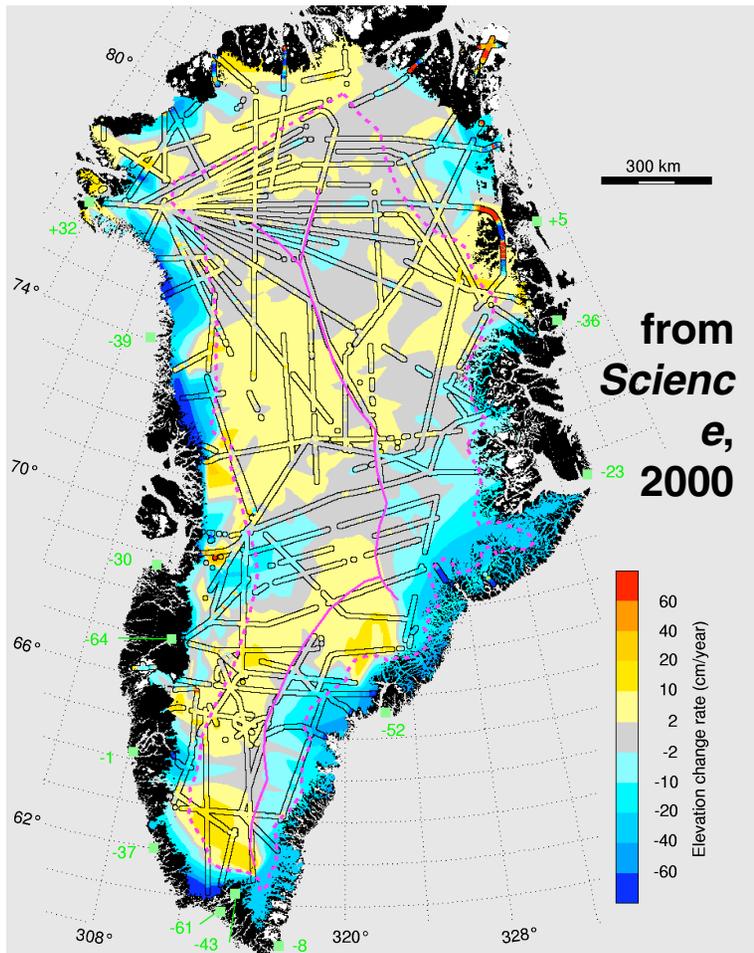
ICESat Cal/Val



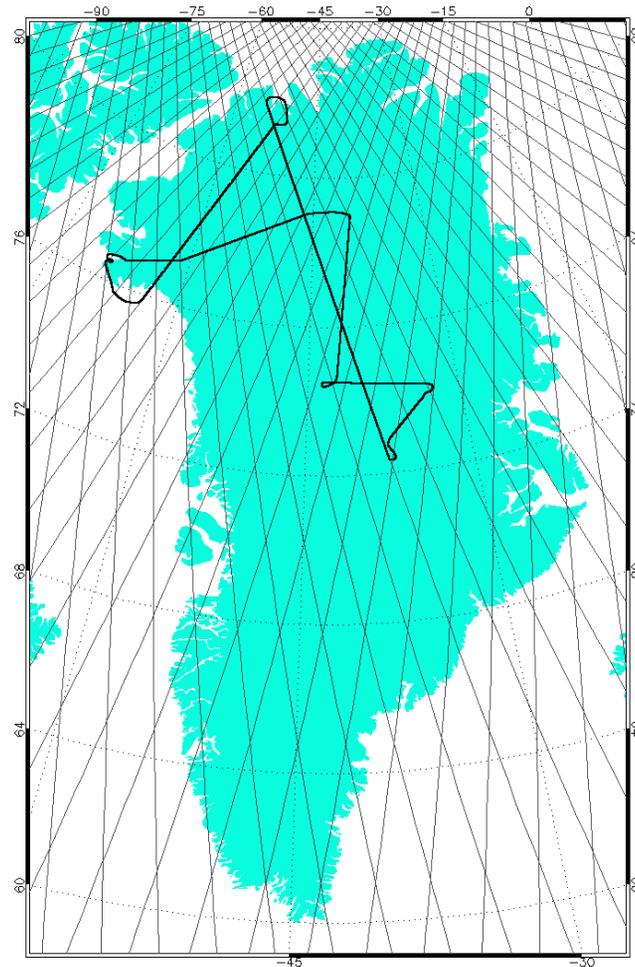
for ice sheets



...builds on 10 years of Greenland Ice Sheet elevation change surveying with NASA's ATM airborne laser



Contact Bill Krabill/GSFC/WFF



ICESat cal/val orbits, with example coverage from P3 flight in 2002